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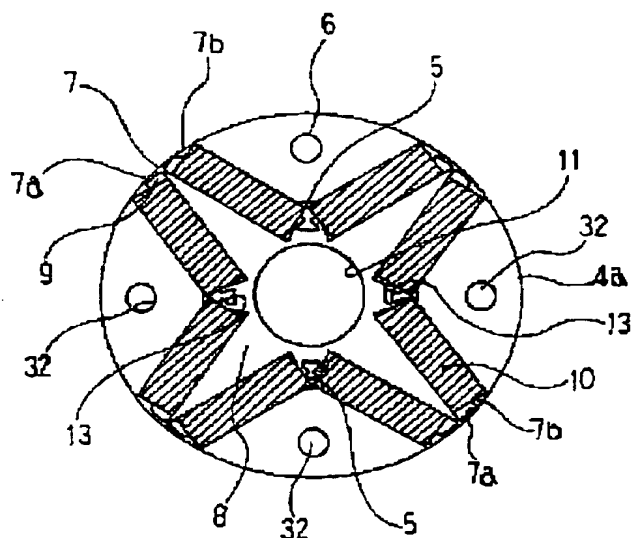
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TITLE : PERMANENT MAGNET MOTOR



ABSTRACT : PROBLEM TO BE SOLVED: To reduce the leakage magnetic fluxes from between magnetic poles in contact, with required strength kept in the iron core of a rotor, and enable the suppression of noise caused by the rigidity of the rotor, by press-fitting a permanent magnet so that it may contact with an elastic mechanism.

SOLUTION: A magnetic pole coupling 7 existing between the flank of a permanent magnet 10 and the periphery of the iron core 4 of a rotor is made of a narrow part 7a narrow in diametrical direction and a wide part 7b wide in diametrical direction. In a permanent magnet constituted this way, since the magnetic pole coupling 7 is provided with the said narrow part 7a, the magnetic resistance between the adjacent magnetic poles 6 increases. Accordingly, the leakage of magnetic fluxes decreases between the magnetic poles 6, and it becomes possible to prevent the drop of motor efficiency. Moreover, since an elastic mechanism 13 is provided at a magnet insertion port 5, the permanent magnet 10 and the iron core 4 of the rotor are united, and the rigidity of the rotor is elevated. Therefore, the occurrence of the noise caused by oscillation mode can be suppressed.

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